

FIG. 2A

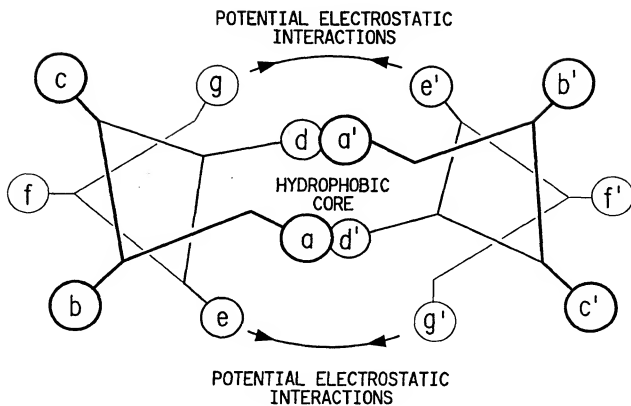


FIG. 2B

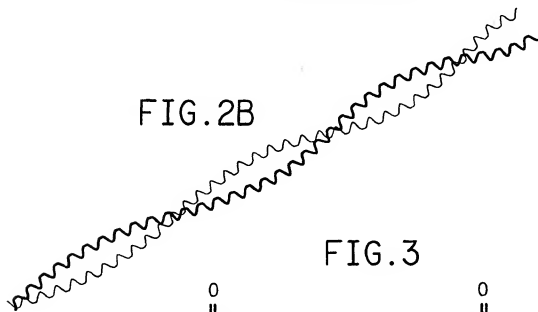
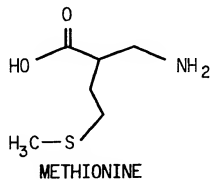
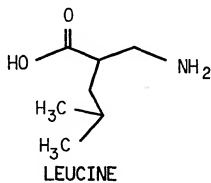


FIG. 3



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FIG. 4a

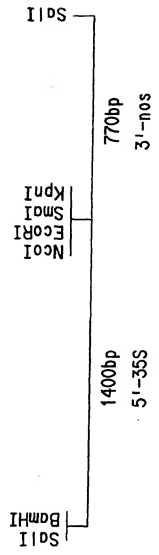


FIG. 4b

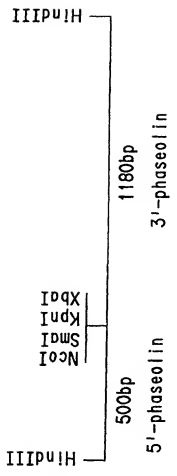
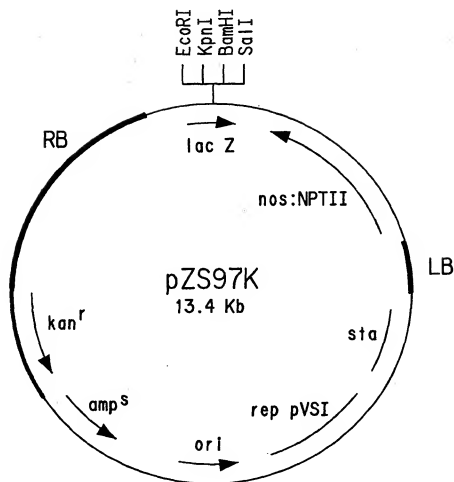


FIG.5



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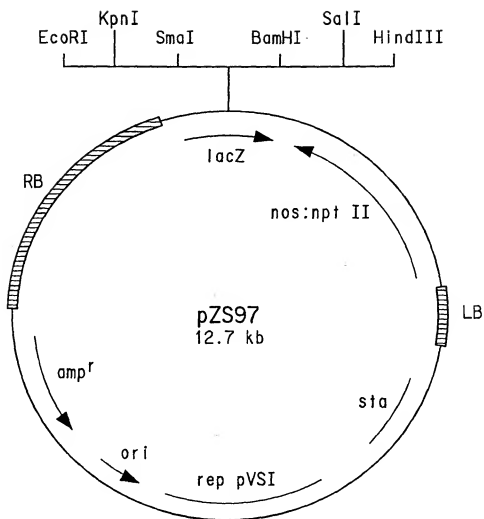


FIG. 6

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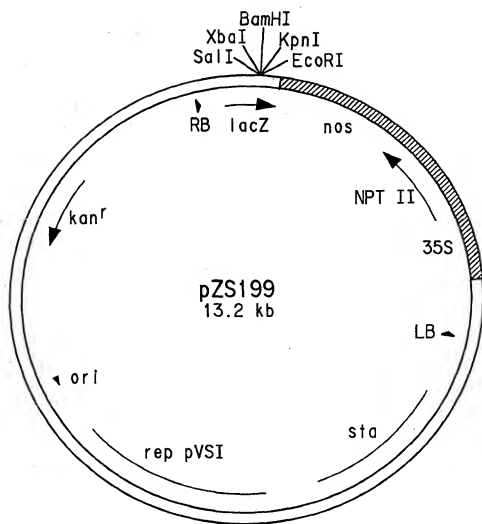


FIG. 7A

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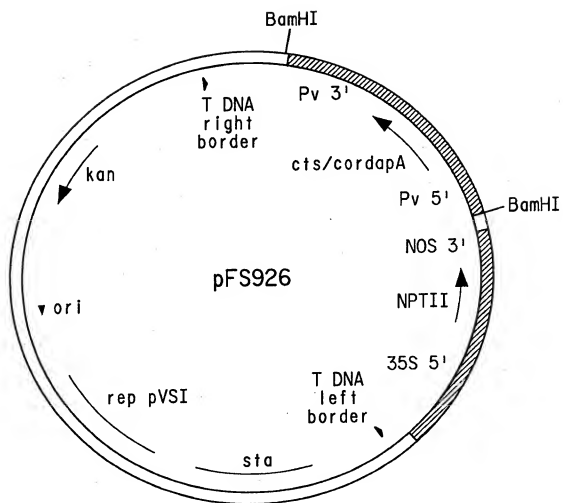


FIG. 7B

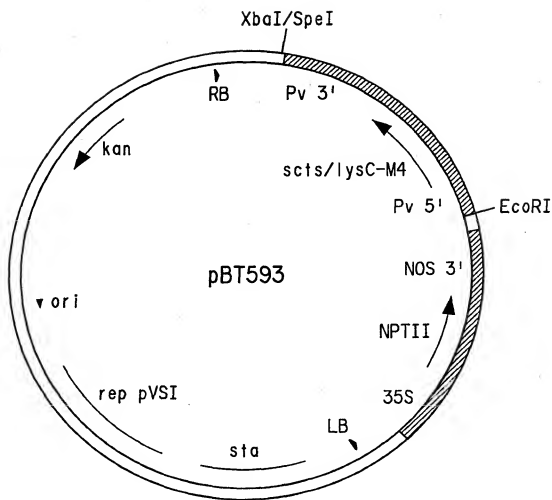


FIG. 7C

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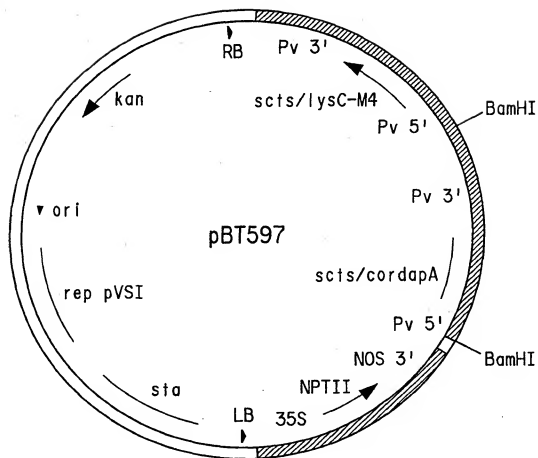


FIG. 7D

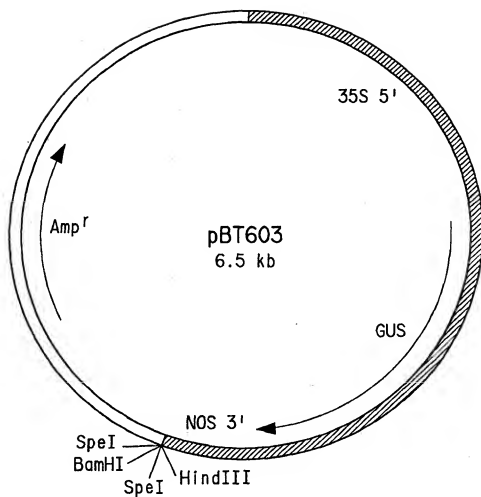


FIG. 8A

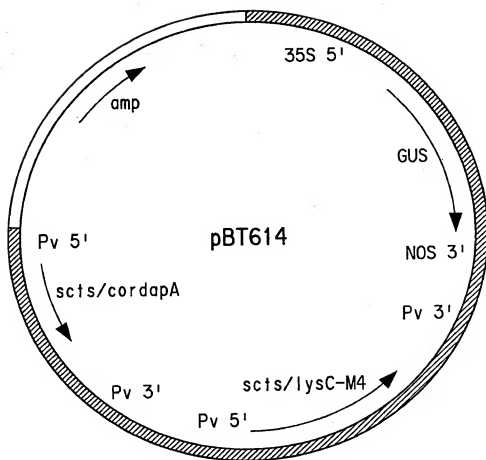


FIG. 8B

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FIG.9

SEQ ID NO:104

S. cerevisiae SDH

```
19 K K S G V L I L G A G R V X P A A D F L A S V R T I S S Q Q W Y K T Y F G A D S E E K T D V H V I 68
   . . . | | | . | . | . | | | .
1  M G K N V L L I G S G F V A Q P V I D T L A A . . . . . N D D I N V T 30
   . . . . .
69 V A S L Y L K D A K E T V E G I S D V E A V R L D V S D S E S L L K Y V S Q V D V V L S L I P A S C 118
   | | : | : | : | : | : . . . | | | . | : : | | | : | : |
31 V A C R T L A N A . Q A L A K P S G S K A I S L D V T D D S A L D K V L A D N D V V I S L I P Y T F 79
   | :
119 H A 120
    | :
    80 H P 81
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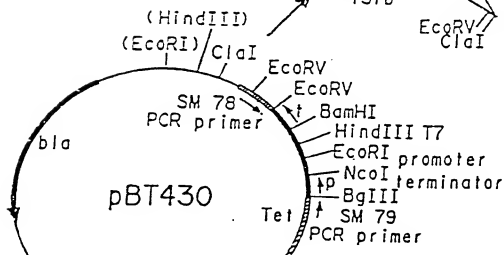
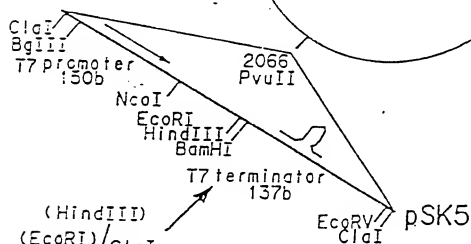
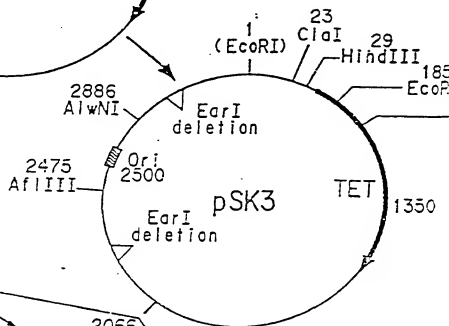
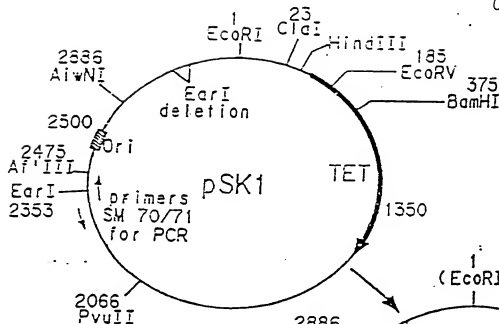
SEQ ID NO:105

S. cerevisiae SDH

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1 K H T A T L L E F G D I K N G Q T T A M A K T V C P A A I G A L L I E D K I K T R G V L R L 50
   . : | | : : | : . . . . | | | . | | : : : . | | . | .
374 T R T S T L V D Y G K V . . G G Y S S M A A T V G P V A I A T K F V L D G T I K G P L L A P Y 420
   . : | : | : | : | | | .
51 E A E V I L P A L D I L . Q A Y G I K I M E K A E 74
   . : | : | : | : | | | .
421 S P E I N D P I M K E L K D Y G I V L K E K T V A 446
```

Fig 10

~~FIG. 7~~



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~~FIG~~

NCOI EARL ASP718ECORI

CATGAGCAGACATGAAGCC GATGGAGAGAGATGMGCCGTGTAAGTACCG
CTCTCTTTACT TCGGCTA CCTTC TCCTCTCCGCACATCATCGCTTAA
MEEKMKAMEEKMKA

LIGATE OLIGOS

GATGGAGGAGAAGATGAAGGC

CCGCCCTTCTACTTCGGCTA

MEKKKA

LIGATE TO EARI CUT VECTOR

NCOI
EARI
ASP718ECORI
CATTGAGGAGAGATGAGGC GATGGAAGAGAGATGAAGCCGCTATAGTACCG
CTCTCTTCTACTTCGGCTA CCTCTCTTCTACTTCGGCTA CCTCTCTTCGACTTCGACTTCGACTTAA
WFEKWKAMEEKMKAMKA

FIG. 12

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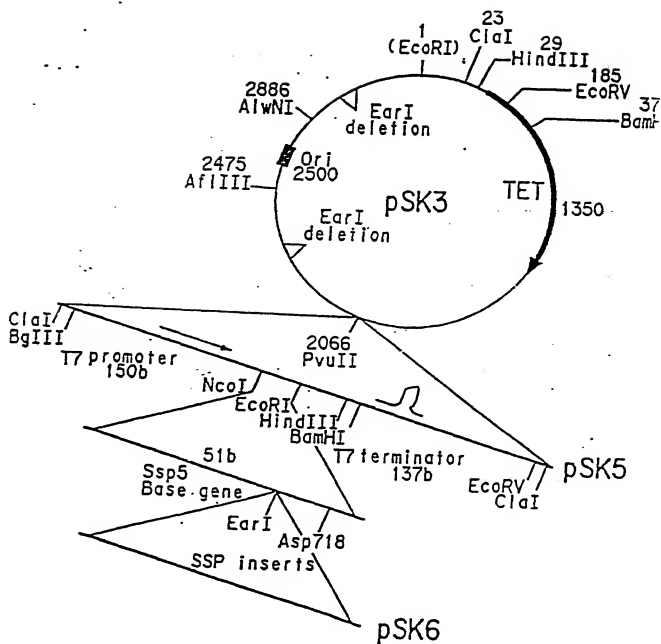


FIG. 13

NCOI EARI BSPHI STOP ASP718 ECORI BASE GENE
 CATGGGAGAGATGAAAA GCTCGAAGAGAGATGAAGTCATGATGCTAGGTACCG
 CTCTCTTCTACTTTTCTA GCTCTCTTCTACTTCCGAGTACTTCACTATCCATGGCTTAA
 M E E K M K K L E E K M K V M K

OLIGONUCLEOTIDE INSERTS

GCTGGAGAAAGATGAGGCTATGGAGGAGAGATGAATGGCTTGAGGAAAGATGAAGAA
 CCTTCTTTTCTACTTCCGATACCTCTGTTCTACTTTACCGACTCTTTTCTACTTCTCGA
 L E E K M K A M E E K M K W L E E K M K K

↓ OLIGOS LIGATED INTO EARI CUT BASE GENE

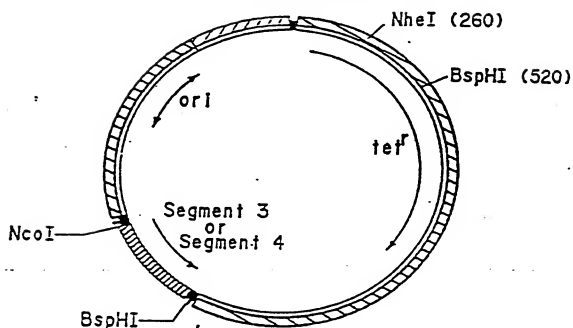
NCOI
 CATGGGAGAGATGAAAA GCTGGAGAAAGATGAAGGCTATGGAGGAGAGATGAATGGCTTGAGGAAAGATGAAGAGCT
 CTCTCTTCTACTTTTCTA GCTCTCTTCTACTTCCGATACCTCTGTTCTACTTTACCGAACTCTTTTCTACTTCTCGA
 M E E K M K K L E E K M K A M E E K M K W L E E K M K K L

EARI BSPHI ASP718 ECORI
 GAGAGAGATGAAGTCATGATGCTAGGTACCG
 GCTTCTCTTCTACTTCCGATCTTCACTATCCATGGCTTAA CLONE pSK34
 E E K M K V M K

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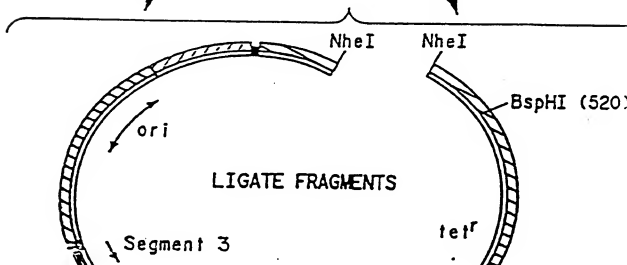
FIG. 14A

FIG. ~~14A~~ 13A



Segment 3 Digest NheI/BspHI Segment 4 Digest NheI/NcoI

FIG. ~~14B~~ 13B



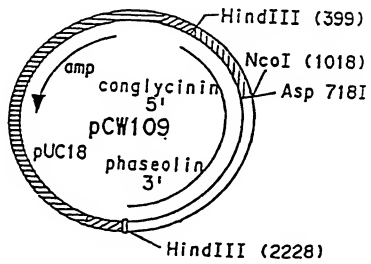
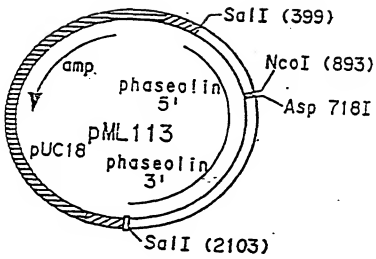
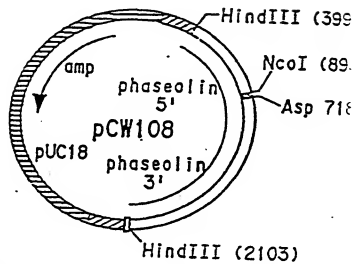
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FIG 15

FIG. ~~12/14~~

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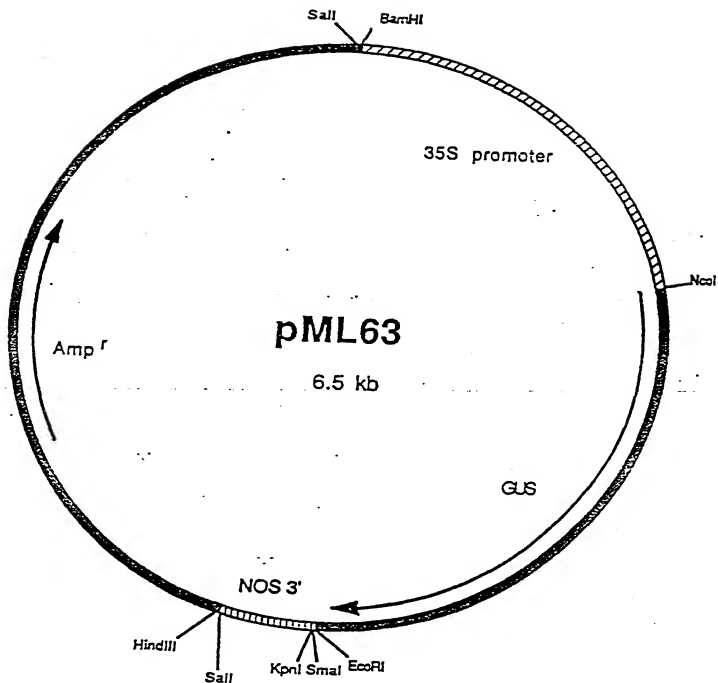


FIG. ~~14~~ 15

FIG. 16

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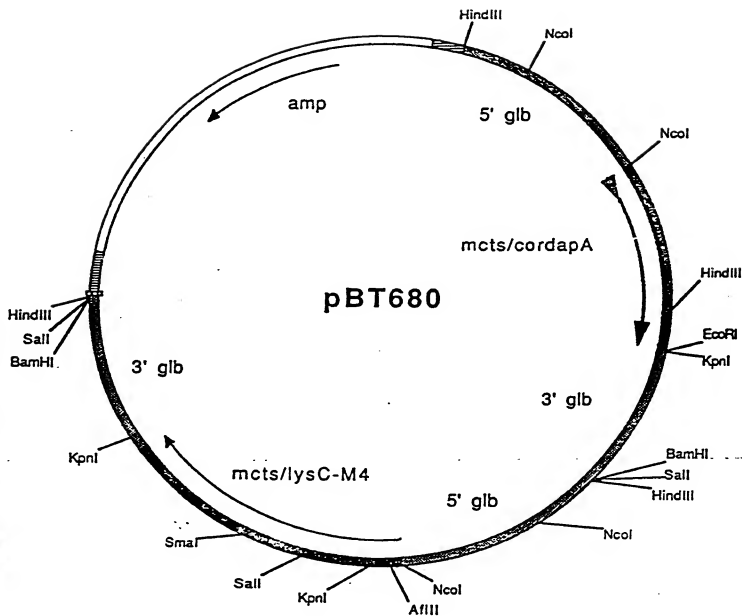


FIG. 17
FIG. 16

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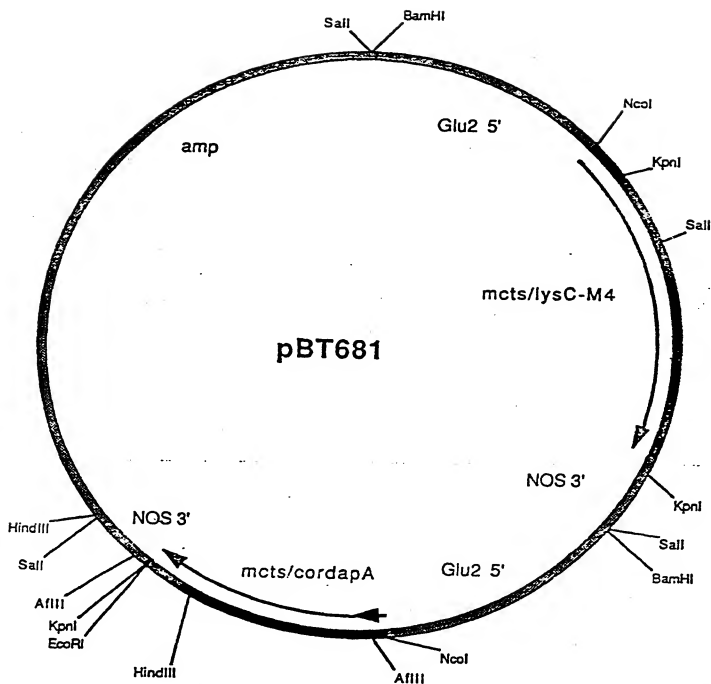


FIG. 18

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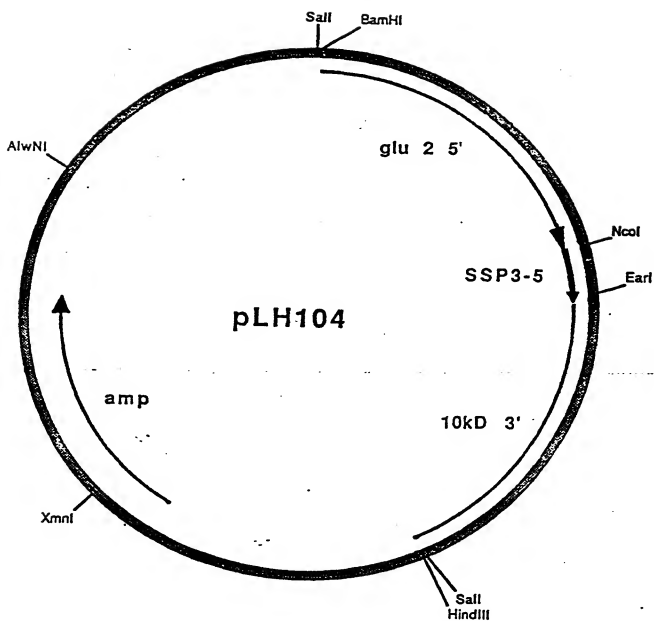
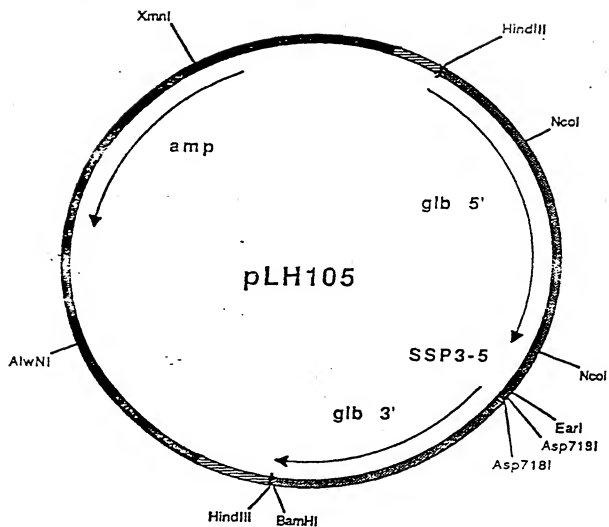


FIG. 19

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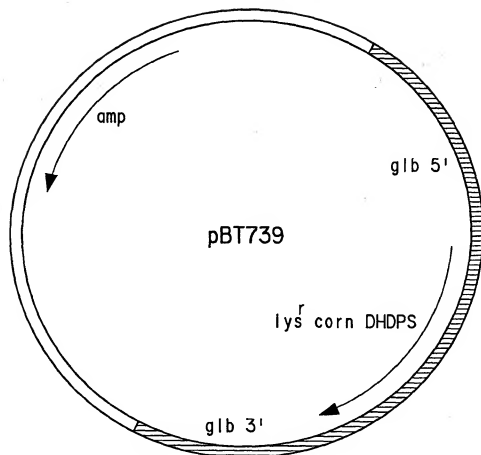


FIG.21

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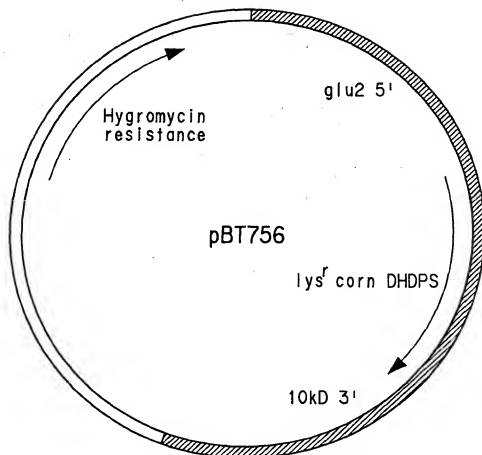


FIG.22

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